Metacognizing across Self and Socio Dialectics

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Abstract: In this paper, we discuss metacognition against a backdrop of 21st century traversals, where learners are constantly moving and interacting across different contexts. We describe how learners’ traversals are underpinned by triadic coupling relationships between self, social others, and cultural resources. Drawing our observations from contemporary contextual spaces of online games, we articulate how a situated and embodied form of metacognition pivots the dialectics of the aforementioned coupling relationships.

Introduction

The work on metacognition has historically been situated within individual, cognitive-constructive activity (Winne, 1997) that places focus on individual characteristics such as self-efficacy, goal setting, and achievement. In a globalized learning landscape afforded by new technologies, the ability to engage in metacognition and reflective dispositions remains much desired skills for learners as they traverse across information laden and socially rich environments—learners are constantly engaged in co-appropriation of knowledge, as their individual actions impact the collective learning of their social communities. This intertwining relationship between individual performances and the emergence and regulation of social communities represents the central focus of our research. At the individual level of analysis, we are concerned with learners’ metacognition as they make meaning and self-regulate learning in the context of social communities. At the collective level, we posit that the role of metacognition is central within the emergence of social communities. Within this flux of interactivity, concepts of play and learning become increasingly intertwined as new genres of interactive spaces, such as the massively multi participant worlds of World of Warcraft (WoW), afford players with novel and unique opportunities for learning. Implicit to this interplay, we posit that the role of metacognition is critical for the successful enactment of self- and socio-regulation. We argue for a pedagogical shift from individual constructivist perspectives of metacognition to a contextually-cognized framing of metacognition within the context of 21st century literacies.

Metacognition within interactive spaces of learning

Situating our research within the contextual space of WoW, we conducted a case study on four youth game players between the ages of 14-18 studying in local educational institutions. We focused on unpacking the ways by which these game players create, negotiate, and reproduce the social realities of their multispatial experiences within the contexts of their respective social spaces through constructs of cognition and metacognition. In-game chat logs were captured using a third-party game add-on called ChatLogger while enactment frames and videos were captured via Fraps. Textual data was then analyzed in terms of the level of discourse as evidenced by sets of chat utterances on specific topics, for example, focusing on strategy talk regarding best approaches to in-game problems or talk as evidence of critical reflection. In-depth interviews were supplemented with field notes from the first author’s participant-observer sessions to corroborate informant’s logged texts and game enactments.

Metacognizing in context

Arising from our study, findings indicate that situatedness of metacognition is key within the process of finding an affordance fit in managing or regulating one’s fluency of experience and performance-in-action (thus embodied). For it is when one’s intramental epistemic structures and knowledge encounters a breakdown within novel social contextual nuances that metacognition or the ability to engage in situated higher order thinking is critical in managing the tension between individual performances and the collective. In the course of problem solving processes, metacognition comes into fore when one’s current thinking and strategies fail. At such a breakdown stage, learners may have to unlearn and relearn new strategies and skills in order to cope with new contexts. In this sense, a new, situative view of metacognition pervades traditionally construal of “thinking about thinking” in its mentalistic, Cartesian form. Instead, such a perspective has a strong coupling relationship with the process of coming to recognize one’s shortcomings in a particular context both in terms of thinking and embodied performance and regulating (including perseverance) towards fluency in that new and novel situation. Figure 1 explicates this relational perspective, of metacognition as achieving “fits” between self, others, and cultural resources.
Metacognition and self

The construct of metacognition involves both the concept of self and the emergence of conscious control over one’s actions. For example, we observed that the fantasy constructions of identity in WoW offer an exploration of alternative subjectivities and playful representation of self. Cognizant of an audience, performative spaces such as WoW creates the context for player to enter into a dialectical relationship with his character role. At the crux of such enactments, is the construct of self-belief and self-efficacy that, according to Goffman (1959), spans a continuum with the tendency to accept one’s self as “performed.” This is to say that on a more quotidian level, a person’s sense of self is very much tied to his ability to believe in the roles he played. The matter is complicated because, as we acknowledge, character roles are not played by a single, stable self. Rather, the extent to how well a person plays a social role usually depends on how much the person believes in the role.

Metacognition and socio others

Within the flux of interactions in WoW, establishing intersubjectivity stems from not only a player’s sense of self but also a collective sense of shared identity. This is evidenced by the strong commitments informants placed on the tasks, errands, and obligations they ascribed to within the game space. We noted that not only do the game interactivity interweaves a deeply meaningful and experiential space that entails immense investments of energy, emotion, and time, but so too do they seed strong feeling of affinities, underpinned by a common passion where players are further incited to participate and perform, to identity one’s self as another.

Metacognition and cultural resources

The WoW environment represents a complex constellation of resources that must be managed by players as they level up, gearing towards their goals. Players are afforded with not only design and technical add-ons that aid in the leveling process but so too social support arising from the critical mass of players. For example, the add-on Questhelper, provides cartographic waypoints support as players engage in quests in a bid to move up to the next level. Such tools exist as structures in the game environment that seed metacognition – tracking positioning of players and offering indicators of game play simplification relate to how well players monitor their progress, reflect on their strengths and weaknesses, and leverage on cultural resources to achieve their game objectives.

Discussion

In our case study, we see how the structurally coupled relation between player and game environment brings to fore a focus not only on representations of self but so too socio and cultural affordances. As opposed to traditional construal of metacognition, that still dichotomizes mind and body, our informants have shown how their engagement in “higher order thinking” are not without refractions from the embodied subjectivities they experience within the WoW contextual space. A situational awareness of the shared social space within WoW impinges on informants’ action and performance as a dialectical relationship to one’s metacognition. Actions and performance may be reifications of one’s thinking but these are not without contextual and situational refractions of one’s embodied experience within that space. We see how as players re-aligned and re-appropriated in anticipation of their next raid, their resolute to learn, unlearn, and relearn as a group reflects the nuances of their collective metacognitive and regulative endeavors. In this sense a situated and embodied notion of metacognition, at both self and socio regulatory levels, does not only interfaces with an individual/group’s respective appropriation of a community’s way of seeing things and making meaning, but it also contextualizes an individual/group’s self-socio-cultural enactments in terms of establishing fluency and structural between one-self and the context.

References